|  |  |  |
| --- | --- | --- |
| **Curriculum Requirements** | **Even Test Paper** | **Odd Test Paper** |
| * Prior content taught in Year 11 |  |  |
| * waves are periodic oscillations that transfer energy from one point to another |  | Q2 (2) |
| * mechanical waves transfer energy through a medium; longitudinal and transverse waves are distinguished by the relationship between the directions of oscillation of particles relative to the direction of the wave velocity |  | Q1 (4) |
| * waves may be represented by displacement/time and displacement/distance wave diagrams and described in terms of relationships between measurable quantities, including period, amplitude, wavelength, frequency and velocity   *This includes applying the relationships* |  | Q7 (5) |
| * the mechanical wave model can be used to explain phenomena related to reflection and refraction, including echoes and seismic phenomena |  | Q4 (2)  Q5 (6)  Q8 (3) |
| * the superposition of waves in a medium may lead to the formation of standing waves and interference phenomena, including standing waves in pipes and on stretched strings   *This includes applying the relationships for* |  | Q3 (3)  Q6 (4)  Q10 (6) |
| * a mechanical system resonates when it is driven at one of its natural frequencies of oscillation; energy is transferred efficiently into systems under these conditions |  | Q11 (4) |
| * the intensity of a wave decreases in an inverse square relationship with distance from a point source   *This includes applying the relationship* |  | Q9 (7) |
|  |  | 11 questions  46 marks |